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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,387	10/14/2003	Jason O. Adams	6232-248 (190363)	6310

7590 09/29/2004  
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EXAMINER

SCOTT, JAMES R

ART UNIT PAPER NUMBER

2832

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/686,387

**Applicant(s)**

ADAMS ET AL.

**Examiner**

James R. Scott

**Art Unit**

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003 and 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9, 21-31 and 37-40 is/are allowed.
- 6) ☒ Claim(s) 10, 19, 20, 32 and 41 is/are rejected.
- 7) ☒ Claim(s) 11-18 and 33-36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

The drawings filed on 10/14/2003 are objected to by the Examiner and would be acceptable subject to correction of the informalities indicated on the attached "Notice of Draftsperson's Patent Drawing Review," PTO-948. In order to avoid abandonment of this application, correction is required in reply to the Office action. The correction will not be held in abeyance.

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top margin as "Replacement Sheet" (37 CFR 1.121(d)) and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

### **Timing of Corrections**

Art Unit: 2832

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10,19,20,32 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Golbeck for the following reasons:

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10. A switch assembly for controlling an electrical load, the switch assembly including an actuator assembly and a switch mechanism, the actuator assembly releasably engageable with the switch mechanism to switch the mechanism between first and second fixed electrical states, the actuator assembly comprising:

a pushbutton 21,29 received by a pushbutton guide 22,33 for inward translation of the pushbutton with respect to the switch assembly 25,46,48;

Art Unit: 2832

a return member (spring 31) for outwardly biasing the pushbutton with respect to the switch assembly 25,46,48;

a retainer 32,34 located between the pushbutton and the switch mechanism (see fig.3-5)

the retainer providing a reaction surface (note upper surface of the retainer engaging the lower end of the coil spring 31) engaged by the return member 32,34 for outwardly biasing the pushbutton 21, 29;

an elongated actuator member 36 having switch engaging and pushbutton-engaging portions at opposite ends of an intermediate portion (note member 36 which has a frustoconical upper portion engaging the push button engaging portion at 34 and the lower non numbered arcuate portion engaging the switch engaging portion surface at 37), the pushbutton-engaging portion of the actuator located between the retainer and the pushbutton, the intermediate portion of the actuator dimensioned for translatable receipt through an opening in the retainer,

the elongated actuator member 36 operably driven by the pushbutton 21,29 during inward translation of the pushbutton for releasable engagement between the switch engaging portion of the actuator member and the switch mechanism, the opening in the retainer (note the pivoting of member 36 in figs. 3-5) being elongated to provide for lateral pivoting of the actuator member with respect to the retainer during switching of the switch mechanism.

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19. The switch assembly according to claim 10, wherein the switch

Art Unit: 2832

mechanism includes a pivot member 35,37,39 supported for pivoting about an axis 40 and a switch plate 42 supported for switching movement between first and second positions associated with the first and second fixed electrical states.

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20. The switch assembly according to claim 19, wherein the pivot member 35,37,39 is adapted for contact with the switch plate 42 during pivoting of the pivot member.

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32. A switch assembly for controlling an electrical load, the switch assembly including a switch mechanism and an actuator assembly adapted to engage the switch mechanism, the switch assembly comprising:

a pivot member 37 supported for pivoting about an axis 40;

a spring 43 having coils and located between the pivot member 37 and an adjacently located member 41,42 of the switch assembly; and

a spring damper 41 received within the coils of the spring 43 and contacting the coils to limit resonating vibrations of the coils following a change in relative

angular orientation (see figs. 3 and 4) between the pivot member 37 and the adjacently located member 41,42.

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41. A switch assembly for controlling an electrical load, the switch assembly comprising:

Art Unit: 2832

an actuator assembly including a pushbutton 21, 29, a pushbutton guide 22,33, a pushbutton return spring 31, an actuator pin 36 and a retainer 32,34, the pushbutton 21,29 slidably received by the pushbutton guide 22,23, the retainer 32,34 connected to the pushbutton guide 22,33, the pushbutton return spring 31 located between the pushbutton 21,29 and the retainer 32,34 to outwardly bias the pushbutton 21, 29, the actuator pin 36 including a shaft portion (not numbered) received through an opening (not numbered) in the retainer, the retainer opening being elongated to allow for lateral pivoting of the pin shaft portion (not numbered) with respect to the retainer 32,34; and a switch mechanism including a pivot member 37, a switch plate 42 and a contact spring 41,43, the pivot member 37 supported for pivoting about a first axis, the switch plate 42 supported along an edge (see the center of the switch plate) of the switch plate for pivoting about a second axis (the vertical axis or plane with respect to the central fixed contact) between first and second switch plate positions (note figs. 3 and 4), the contact spring 41,43 located between the pivot member 37 and the switch plate 42, the contact spring 41,43 reacting against the pivot member 37 to apply a force to the switch plate 42 tending to maintain the switch plate in one of the switch plate positions (note figs. 3 and 4).

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### Cited References

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hansen, Stefani and Armitage constitute prior art cited by applicants in their specification pertaining to pushbutton actuated switches.

Douglas (065) and (180), Kohl, Fraser, Bull and Bauer et al disclose pushbutton operated snap action switches with the pushbutton mechanism including a flexible camming member which oscillates upon the depression of the flexible camming member. Note in particular Kohl and the first and second operative electrical states in figures 1 and 2. Bauer et al disclose the use of the flexible movable contact 30 in fig. 2, which pivots on the central contact from one electrical state of operation to the other state of operation.

### **Summary**

Cla9ms 10,19,20,32,41 are rejected.

Claims 11-18, and 33-36 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-9,21-31,37-40 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James R. Scott whose telephone number is (571) 272-1999. The examiner can normally be reached on Monday-Friday between 1-5p.m.

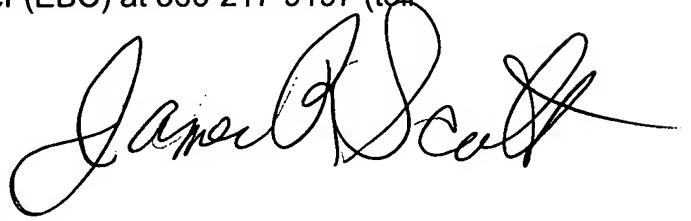
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax



Art Unit: 2832

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "James R. Scott", with a stylized, cursive script.

JRScott: jrs  
9/23/2004

James R. Scott  
Primary Examiner  
GAU 2832  
571-272-1999